

ABSTRACT OF THE DISCLOSURE

In a method for motion estimation using adaptive patterns in a video sequence compression system, an initial search pattern located at a center of a search window in a block of a video frame is determined. A location of a minimum block distortion measure (BDM) is searched in the initial search pattern. A horizontal search pattern for functioning on the search window is determined in the horizontal direction to search a location of a minimum BDM in the horizontal search pattern. A vertical search pattern for operating on the search window is determined in the vertical direction to search a location of a minimum BDM in the vertical search pattern. The location of the minimum BDM in each pattern is designated to be a motion vector. A search pattern to be used in a subsequent searching stage is determined based on the location of the minimum BDM in each pattern.